

Application No. 10/042,195

Attorney Docket No. 040679/1417

REMARKS

Applicant respectfully requests reconsideration of the present application in view of the reasons that follow. Claims 1-14 were and remain pending in the present application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

In the Office Action, the rejection of claims 1-14 under 35 U.S.C. § 103(a) was maintained. The claims were deemed unpatentable over Nakamura et al. (U.S. Patent No. 6,004,321) in view of Tamatsu et al. (U.S. Patent No. 6,317,073). For at least the following reasons, this rejection should be reconsidered and withdrawn.

The present independent claims 1 and 14, recite a delay providing section that provides a delay for the velocity of at least one of the vehicle and the preceding vehicle, the delay provided detected velocity being used to set the target inter-vehicle distance. The claims also recite the target inter-vehicle distance setting section setting the target inter-vehicle distance on the basis of the detected velocity for which the delay is provided by the delay providing section.

Nakamura et al.

The Office Action has maintained that Nakamura et al teaches delaying acceleration/deceleration when the distance is not within a collision threshold and that this is recited in the reference in lines 44 to 67 of column 22 and in lines 37 to 62 of column 32. Applicant has reviewed Nakamura et al. in detail, particularly, the portions cited in the Office Action. The description in lines 44 to 67 of column 22 is related to a resetting of the target speed in steps 1202 to 1205 of Fig. 8. In addition, the description from lines 37-62 of column 32 is a part of the description which explains, during the counter traveling vehicle approach, Fig. 16 on the ICC (Intelligent Cruise Control). In detail, the collision prediction time t_c is compared with threshold values of T_{c2} and T_{c1} . According to the result of comparison, the vehicle response is carried out in the three ways

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of the deceleration due to the engine braking and deceleration mode change such as the maintaining the normal running state under a constant cruise speed. Hence, Applicant submits that there is no description of the delay providing section according to the present invention and the Office Action appears to concede the same.

Tamatsu et al.

The Office Action alleges that Tamatsu et al. describes the delay providing section of the present invention. Specifically, the Office Action asserts that the delay section disclosed in the claims reads on the filter that provides delay to the velocity of the Tamatsu et al reference. Applicant respectfully disagrees.

In Tamatsu et al., the vehicle speed sensor measures the time interval of the pulse signal from the drive system or road wheel system and from the value of which the actual vehicle speed is detected. In practice, an output signal of the vehicle speed sensor 3b is filtered in time sequence to remove noise, thereby resulting in a time lag between the output of the pulse signals from the pulse generator and the output of the vehicle speed sensor 3b.

In contrast, the delay providing section according to the Applicant's invention delays one of the traveling speeds of the detected host vehicle and the preceding vehicle which is used for the setting of the target inter-vehicle distance on the basis of the traveling speed which is delayed from the time at which the traveling speed is detected. Thus, the variation of the target inter-vehicle distance along with the acceleration or deceleration of the preceding vehicle or the host vehicle is slightly delayed and the host vehicle is accelerated or decelerated in such a manner that the detected inter-vehicle distance is made coincident with the slightly delayed target inter-vehicle distance. Hence, the speed delay value D_v that Tamatsu et al. describe is applicable to the detected value of the vehicle speed of the host vehicle.

However, Tamatsu et al. does not teach or suggest using the delay value of D_v to calculate the target inter-vehicle distance. Furthermore, Tamatsu et al. does not teach or suggest the delay in the variation of the target inter-vehicle

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distance. There is no teaching or suggestion in Tamatsu et al. that the delay value D_v is even applicable to the calculation of the target inter-vehicle distance as is recited in the present independent claims. The reference cannot be deemed to read on the delay providing section as defining in the present claims. Accordingly, the rejection under 35 U.S.C. § 103(a) of independent claims 1 and 14 and those claims depending therefrom should be reconsidered and withdrawn.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

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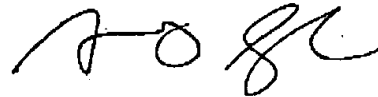
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The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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Date



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